

Application Serial No. 10/010,293

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Listing of the Claims:

1. (Currently Amended) A fluid coupling including a fluid quick connector and an endform comprising:

an electrically conductive connector housing having a bore extending from one end;

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform when the endform is inserted into the housing to electrically connect the endform and the quick connector housing, the contact member including:

a first portion mounted in the bore of the connector housing in direct contact with the housing; and

an arm extending from the first portion and passing through the open

end of the bore in the endform into direct contact with an inner surface of the bore of the endform.

Claims 2 and 3. (Cancelled)

4. (Previously Presented) The fluid quick connector of claim 1 further comprising:

the arm having a bent end extending into the open end of the endform.

5. (Currently Amended) A fluid quick connector comprising:

an electrically conductive connector housing configured to mate with an endform having a bore extending from one end;

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

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a first portion mounted in the quick connector housing bore in contact with the quick connector housing; and

an arm extending from the first portion and having a bent end extending through the open end of the bore in the endform into contact with an inner surface of the endform, the arm and the bent end including:

a beam portion extending from the first portion of the contact member;

a back reverse taper tapered surface extending angularly from the beam portion; and

a tip end extending angularly from an edge at one end of the back reverse taper tapered surface and defining a lead-in surface engaged by a tip end of the endform.

6. (Currently Amended) The fluid quick connector of claim 5 wherein:

the back reverse taper tapered surface extends at an obtuse included angle with respect to the beam; and

the tip end extends at an obtuse included angle from the back taper surface.

7. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing having a bore extending from one end;

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

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a first portion mounted in the bore of the connector housing in contact with the housing the first portion including, a tubular body mounted in the bore in the housing; and

an arm extending from one end of the tubular body and passing through the open end of the bore in the endform into contact with an inner surface of the endform.

8. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing configured to mate with an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, the tubular body being longitudinally split to form spaced edges allowing compression of the tubular body for press-fit mounting of the tubular body in the bore in the quick connector housing; and

means, extending from one end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

9. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing configured to mate with an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, a second end oppositely formed from a first end of the body, a lead-in edge formed on the second end; and

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means, extending from the first end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

10. (Previously Presented) The fluid quick connector of claim 1 wherein the first portion of the contact member comprises:

an annular ring mounted in the bore in the quick connector housing, the arm extending from the annular ring.

11. (Currently Amended) The fluid quick connector of claim 10 further comprising:

the means being an arm having a bent end extending through the open end of the bore in the male endform.

12. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing configured to mate with an endform having a bore extending from one end; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

an annular ring mounted in the quick connector housing bore in contact with the quick connector housing;

means, extending from the annular ring, for passage through the open end of the bore in the endform into contact with an inner surface of the endform; and

at least one locating member extending angularly from the annular ring of the contact member, the at least one locating member engagable with the end of the endform to center the annular ring relative to the male endform.

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13. (Previously Presented) The fluid quick connector of claim 10 wherein:

the annular ring is mountable in registry with a shoulder between two stepped bore portions of the bore in the quick connector housing.

Claims 14-30. (Cancelled)

31. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing having a bore extending from one end;

an electrically conductive endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a first portion mounted in the quick connector housing bore in contact with the quick connector housing; and

an arm extending from the first portion and having a bent end extending through the open end of the bore in the endform into contact with an inner surface of the endform, the arm and the bent end including:

a beam portion extending from the first portion of the contact member;

a back taper surface extending angularly from the beam portion; and

a tip end extending angularly from an edge at one end of the back taper surface and defining a lead-in surface engaged by a tip end of the endform.

32. (Previously Presented) The fluid quick connector of claim 31 wherein:

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the back taper surface extends at an obtuse included angle with respect to the beam; and

the tip end extends at an obtuse included angle from the back taper surface.

33. (Canceled)

34. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing having a bore extending from one end;

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, the tubular body being longitudinally split to form spaced edges allowing compression of the tubular body for press-fit mounting of the tubular body in the bore in the quick connector housing; and

means, extending from one end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

35. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing having a bore extending from one end;

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

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an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

a tubular body mounted in the bore in the quick connector in contact with the quick connector housing, a second end oppositely formed from a first end of the body, a lead-in edge formed on the second end; and

means, extending from the first end of the tubular body for passage through the open end of the bore in the endform into contact with an inner surface of the endform.

Claims 36 and 37 Canceled

38. (Previously Presented) A fluid quick connector comprising:  
an electrically conductive connector housing having a bore extending from one end;

an endform having a bore extending from an open end, the open end of the endform inserted into the bore in the housing; and

an electrically conductive contact member mounted in the housing and contacting the endform to electrically connect the endform and the quick connector housing, the contact member including:

an annular ring mounted in the quick connector housing bore in contact with the quick connector housing;

means, extending from the annular ring, for passage through the open end of the bore in the endform into contact with an inner surface of the endform; and

at least one locating member extending angularly from the annular ring of the contact member, the at least one locating member engagable with the end of the endform to center the annular ring relative to the male endform.